

**REMARKS**

Claims 1-16 remain in the application. Claims 1 and 4-8 have been amended. No new matter has been introduced via these amendments.

**35 U.S.C. § 112 Rejections:**

Claims 1-16 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. More specifically, the Examiner holds that the Applicants have failed to define the term “essentially compact” as it pertains to the invention as claimed and raises an issue relative to the hollow microspheres.

The Examiner is correct in that the term essentially compact requires that the adduct be non-foamed. The Examiner continues by indicating that the term non-foamed “is considered to mean that the adduct is devoid of cells or a cellular structure.” As alluded to in the Applicants’ prior response to this issue and as made clear in the MPEP (*see MPEP 2163*), the standard of one of skill in the art is pertinent when a written description issue has been raised. With this background, the Applicants respectfully suggest to the Examiner that a person of skill in the urethane and foaming industries can very readily appreciate the difference between (1) an isocyanate adduct that has cells resulting from some sort of foaming process involving the polymer matrix itself, i.e., the reaction product between at least one polyisocyanate and compounds having at least two hydrogen atoms which are reactive toward isocyanate groups, and (2) an isocyanate adduct that is non-foamed yet may still include cells because the non-foamed adduct happens to include a filler that is hollow, such as a hollow microsphere. As indicated in the prior response, there are no blowing agents (physical or chemical) present as a

reactant when dealing with the essentially compact, i.e., non-foamed, adduct of the present invention. If the Examiner so wishes to continue the definition of non-foamed to involve some sort of explanation relating to 'cells' or 'cellular structure', then the Examiner can further continue the definition of non-foamed to include an adduct that is devoid of cells or a cellular structure resulting from the physical or chemical interaction of a blowing agent with the polymer matrix of the adduct. In other words, those of skill in the art can readily appreciate the existence of a non-foamed isocyanate adduct that has cells (or a cellular structure) that results from something else, such as a hollow additive.

In view of the Applicant's prior response and also the further explanation provided above that is apparent to those skilled in the art, it is respectfully submitted that the term essentially compact satisfies the written description requirement and that this § 112 rejection should be withdrawn.

Claims 2, 4-7, and 16 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Examiner holds that it is unclear if the reference in the claims to "a hot wire method" corresponds only to the hot wire method disclosed within page 7, lines 38+ of the specification. Notably, the Examiner even acknowledges the Applicants' prior response, yet still concludes that it is unclear that a "hot wire method" refers only to the hot wire method disclosed within page 7, lines 39+ of the specification.

The Applicants are amenable to a solution with the Examiner. That said, the Applicants are considerably confused by the Examiner's position. As the Examiner is aware, it is a general tenet of patent law that the claims are supported by the specification. In this application, the

specification describes what the hot wire method is and, in a prior response, the Applicants even confirmed on the record that “the hot wire method referred to in the claims corresponds only to the hot wire method disclosed within pages 7, lines 38+ of the specification” (*see prior response, emphasis added*). Notably, this statement on the record is what was agreed upon in the telephonic interview with the Examiner on February 13, 2006. If the Examiner believes that some form of amendment to claims 2 and 16 would remedy this issue, the Applicant is interested in such a solution. The Applicants contend that claims 2 and 16 are enabled and, to date, the Applicants have merely been attempting to satisfy the Examiner’s position on this issue. Even without such an amendment to claims 2 and 16, the Applicants respectfully submit that this § 112 rejection should be withdrawn.

Finally, claims 1-16 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Relative to the Examiner’s first point (essentially compact), the Applicants respectfully suggest that the explanation already provided above in the context of the § 112, first paragraph, rejection satisfies the Examiner’s first point.

Relative to the Examiner’s second point (the fillers), claims 4-7 have been amended to remedy this issue.

Relative to the Examiner third point (claims 8 and 11-13), the Applicants have, in an effort to lend clarity to the situation, amended claim 8 to make it clear that bii) is a polyetherol...rather than merely a polyol. In view of this amendment, if the Examiner is

maintaining further § 112 issues relating to a lack of mutual exclusivity, the Applicants maintain their prior traversal. Once again, the Applicants respectfully contend that there is no requirement that the components for b) actually be mutually exclusive and, therefore, that claims 8 and 11-13 are in fact definite and in compliance with § 112, second paragraph. To this end, the Applicants have researched relevant portions of both Chapters 700 and 2100 of the MPEP, especially as these chapters relate to 35 U.S.C. § 112, second paragraph (i.e., “indefiniteness”), and the Applicants can find no requirement that elements claimed within a single claim or within depending claims be mutually exclusive. For example, MPEP 2173.05(o), “*Double Inclusion*”, even states that there is no per se rule that “double inclusion” is improper in a claim and that the governing consideration is not double inclusion, but rather is what is a reasonable construction of the language of the claims.

Furthermore, to the extent that there is any overlap, the Applicants reiterate their argument that the claims are definite because additional elements would just be required. For example, in the context of:

- Claim 8        elements bi) and bii) are required;
- Claim 11      elements bi), bii), and biii) are required (even if bi) and biii) overlap);
- Claim 12      elements bi), bii), biii), and biv) are required; and
- Claim 13      elements bi), bii), biii), biv), and bv) are required.

In view of the amendment of bii) in claim 8 and the further explanation above, it is respectfully submitted that the § 112 rejection as it relates to the Examiner’s third point be withdrawn.

Relative to the Examiner's last point (claim 15), claim 8 has been amended to make it clear that the claimed molar mass is 300 g/mol or greater. There is full support in the specification for this amendment to claim 8 to now include 300 g/mol (not just greater than 300 g/mol). After all, the lower end of the preferred range is "from 300" which clearly indicates an inclusion of 300 g/mol.

**35 U.S.C. § 102 and/or 103 Rejections:**

Claims 8-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bartz et al. (United States Patent Application Publication No. 2001/00512621). The Applicant respectfully traverses.

As the Examiner is aware, claim 8 claims a process where the compounds having reactive hydrogen atoms specifically comprise at least one polyetherol bi) having a functionality greater than 2.5 and a molar mass 300 g/mol or greater, and at least one polyetherol bii) having a molar mass greater than 1000 g/mol and a functionality of from 1.7 to 3. Bartz et al. does not disclose, teach, or suggest these claimed compounds with the specificity required for a proper rejection under 35 U.S.C. § 102(b). Paragraphs [0006], [0029], and claim 1 of Bartz et al. indicate a possibility for polyether polyalcohols having a functionality of from 1.5 to 5 and a molecular weight of from 150 to 7000. However, when this reference is taken as a whole, it is clear that there is no specific teaching for the precise combination of polyether polyols bi) and bii) as the Applicants have claimed here. This fact is especially apparent when it is considered that element b13) of Bartz et al. is optional (from 0 to

30%), and also when reviewing Examples 1 and 2 which exemplify the disclosure of Bartz et al. Referring to Examples 1 and 2 of Bartz et al., there are no polyether polyols disclosed whatsoever. That is, in Examples 1 and 2, the compact veneer of Bartz et al. is made strictly with Lupraphen<sup>®</sup> VP 9143 which is a polyester polyol not a polyether polyol. For these reasons, the Applicants respectfully traverse this § 102(b) rejection and request that it be withdrawn as overcome.

Claims 1-3 and 16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Onder (United States Patent Application Publication No. 2004/0087739 A1). Claims 4-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Onder in view of Grimm et al. (United States Patent No. 6,387,447) and Poisl et al. (United States Patent Application Publication No. 2003/0134920).

Independent claim 1 has been amended to further clarify that the compounds having reactive hydrogen atoms comprise at least one polyetherol bi) having a functionality greater than 2.5 and a molar mass 300 g/mol or greater. There is clear support in the application as originally filed for this amendment. Claim 1 as amended distinguishes around the disclosure and teachings of Onder. That is, Onder does not disclose, teach, or otherwise suggest the invention as now claimed in independent claim 1.

In contrast, Onder discloses a thermoplastic ether polyurethane and strictly teaches use of difunctional polyether polyols to teach the thermoplastic ether polyurethane (*see Paragraph [0011] where PTHF is strictly a difunctional polyol*). As those skilled in the art readily appreciate, this strict teaching of difunctional polyols and, for that matter, the

overwhelming teaching of highly preferred difunctional polyisocyanates is not surprising when one considers that thermoplastic ether polyurethanes are most commonly manufactured by reacting difunctional compounds. Once again, when higher functional compounds are used to manufacture a thermoplastic ether polyurethane, the thermoplastic ether polyurethane loses its thermoplastic properties. Thus, Onder does not disclose and in fact teaches away from the at least one polyetherol bi), which must have a functionality greater than 2.5.

In view of the amendments to the claims and the explanations set forth above, it is respectfully submitted that any § 102 or § 103 rejections relying on Onder are overcome. Notably, in the context of the § 103 rejections, the secondary references to Grimm et al. and Poisl et al., either alone or in combination, do nothing to remedy the deficiencies inherent in the disclosure and teachings of Onder in view of amended claim 1 and element bi).

It is respectfully submitted that the claims as amended are in allowable form such that the application is now presented in condition for allowance, which allowance is respectfully solicited. The Commissioner is authorized to charge our deposit account no. 08-2789 for any additional fees or credit the account for any overpayment.

Respectfully submitted,

**HOWARD & HOWARD ATTORNEYS**

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**Date**

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